

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-----------------|----------------------|-------------------------|-------------------------|--|
| 10/602,858 | 06/25/2003 | Tracy C. Klaus | 2291-001 | 2291-001 2106 | |
| 27522 | 7590 04/11/2005 | | EXAMINER | | |
| SEAN W. GOODWIN 237- 8TH AVE. S.E., SUITE 360 THE BURNS BUILDING CALGARY, AB T2G 5C3 | | | DOLE, TIM | DOLE, TIMOTHY J | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 2858 | | |
| CANADA | | | DATE MAILED: 04/11/2005 | DATE MAILED: 04/11/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | H'A |
|--|--|--|
| | Application No. | Applicant(s) |
| Office Action Summary | 10/602,858 | KLAUS, TRACY C. |
| omec Action Gammary | Examiner Timethy I Dale | Art Unit |
| The MAILING DATE of this communication app | Timothy J. Dole | 2858 |
| Period for Reply | care on the cover circuit mar the | in the second se |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period was reply to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tile within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed /s will be considered timely. I the mailing date of this communication. ED (35 U.S.C. § 133). |
| Status | | · . |
| Responsive to communication(s) filed on <u>03 Fe</u> This action is FINAL. Since this application is in condition for alloward closed in accordance with the practice under E | action is non-final. nce except for formal matters, pr | 1 |
| Disposition of Claims | | |
| 4) ⊠ Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-18 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or | vn from consideration. | ; ; ; |
| Application Papers | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on 25 June 2003 is/are: a) Applicant may not request that any objection to the conference of the c | ☑ accepted or b)☐ objected to drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ol | e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list | s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)). | ion No ed in this National Stage |
| Attachment(s) | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other: | y (PTO-413) Pate Patent Application (PTO-152) |

Application/Control Number: 10/602,858

Art Unit: 2858

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 5, 6, 9-11 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melendez in view of Dvorachek.

Referring to claims 1, 5, 6 and 11, Melendez discloses an improved diagnostic apparatus for diagnosing and servicing pneumatic braking systems of trailers comprising; a pneumatic circuit (fig. 2), adapted for connection to pneumatic braking systems on the trailer; means (fig. 2 (108)), responsive to an electrical signal, for cycling the pneumatic circuit between an applied state wherein air is supplied to the trailer's pneumatic braking systems and a released state wherein air is released from the trailer's pneumatic braking systems (column 4, lines 28-31); a timer circuit (fig. 3 (10)-(13)), electrically connected to the means for cycling the pneumatic circuit for controlling a timed interval between the applied state and the released state, the timed interval being adjustable (column 4, lines 56-63); a diagnostic brake light circuit adapted for connection to a brake light circuit on the trailer, the diagnostic brake light circuit having a circuit switch operable to transmit an electrical signal in on-state and having an indicator means for connection thereto (column 3, line 60 – column 4, line 5); and a plurality of diagnostic signaling circuits

Art Unit: 2858

each circuit adapted for connection to signaling circuits on the trailer (column 3, line 60 – column 4, line 5), each diagnostic signaling circuits having a circuit switch means (fig. 3 (14)-(18)), operable between an off-state and an on-state and having an indicator means (fig. 3 (114)-(118)) for connection thereto.

Melendez does not disclose a pressure actuated switch, connected between the means for cycling the pneumatic circuit and the diagnostic brake light circuit, and operable between an electrically conductive state when pressure is applied to the pressure actuated switch and an electrically non-conductive state when pressure is released from the pressure actuated switch, wherein when the pneumatic circuit is in the applied state causing pressure to be applied to the pressure actuated switch and when the diagnostic brake light circuit is in the on-state, the electrical signal from the brake light switch is conducted through the pressure actuated switch to the means for cycling the pneumatic circuit, maintaining the pneumatic circuit in the applied state, regardless of the state of the timer circuit.

Dvorachek discloses a pressure actuated switch (fig. 2), connected between the means for cycling the pneumatic circuit and the diagnostic brake light circuit, and operable between an electrically conductive state when pressure is applied to the pressure actuated switch and an electrically non-conductive state when pressure is released from the pressure actuated switch (column 2, lines 14-22), wherein when the pneumatic circuit is in the applied state causing pressure to be applied to the pressure actuated switch and when the diagnostic brake light circuit is in the on-state, the electrical signal from the brake light switch is conducted through the pressure actuated switch to the means for

cycling the pneumatic circuit, maintaining the pneumatic circuit in the applied state, regardless of the state of the timer circuit.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the pressure actuated switch of Dvorachek into the apparatus of Melendez for the purpose of activating the actual brake lights on the trailer to provide indication for visual inspection (column 2, lines 18-22).

Referring to claims 9, 10 and 16-18, Melendez discloses the apparatus as claimed wherein the indicator means is an indicator light, which is either an LED or an incandescent light (column 4, lines 5-7).

3. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Melendez and Dvorachek as applied to claims 1 and 11 above, and further in view of Zeleney.

Referring to claims 2 and 12, Melendez as modified discloses the apparatus as claimed except wherein the means for cycling the pneumatic circuit is a solenoid.

Zeleney discloses a pneumatic brake tester wherein the means for cycling the pneumatic circuit is a solenoid (abstract).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the solenoid of Zeleney into the apparatus of Melendez as modified for the purpose of providing a well known alternative for providing air to the braking system (abstract).

4. Claims 3, 4, 7, 8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melendez and Dvorachek as applied to claim 1 above, and further in view of Gutierrez.

Art Unit: 2858

Referring to claims 3, 4 and 15, Melendez as modified discloses the apparatus as claimed except wherein the timer circuit and each diagnostic signaling circuit further comprises a circuit breaker, operable between the circuit switch and the corresponding signaling light circuit on the trailer.

Gutierrez discloses a trailer system tester wherein the timer circuit and each diagnostic signaling circuit further comprises a circuit breaker (fig. 2 (CB-1)-(CB-6)), operable between the circuit switch and the corresponding signaling light circuit on the trailer (fig. 2).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the circuit breakers of Gutierrez into the apparatus of Melendez as modified for the purpose of providing over current protection (column 4, lines 45-55).

Referring to claims 7 and 13, Melendez as modified discloses the apparatus as claimed wherein the plurality of diagnostic signaling circuits further comprise: a left turn signal diagnostic circuit (fig. 3 (15) and (115)); a right turn signal diagnostic circuit (fig. 3 (14) and (114)); and a marker light diagnostic circuit (fig. 3 (18) and (118)).

Melendez as modified does not disclose a tail light diagnostic circuit or an ABS brake light diagnostic circuit.

Gutierrez discloses a tail light diagnostic circuit (fig. 2 (42) and (38)) and an ABS brake light diagnostic circuit (column 5, lines 23-29).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the diagnostic circuits of Gutierrez into the apparatus of

Melendez as modified for the purpose of providing a more through test by checking additional lighting circuits.

Referring to claims 8 and 14, Melendez as modified discloses the apparatus as claimed wherein each of the left and right turn signal diagnostic circuits further comprise a flasher (fig. 3 (4)) for transmitting an intermittent power signal from corresponding left and right turn signal circuits on the trailer to the diagnostic apparatus.

Response to Arguments

- 5. Applicant's arguments filed February 3, 2005 have been fully considered but they are not persuasive.
- 6. In response to Applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as shown above, motivation is found for the purpose of activating the actual brake lights on the trailer to provide indication for visual inspection (Dvorachek: column 2, lines 18-22).
- 7. In response to Applicant's arguments with respect to claims 7 and 13, that "Gutierrez does not teach an ABS braking system" and "that at the time of filing of Gutierrez's patent application, being 1995, ABS brakes were not available" (page 2, last paragraph), it should be

Application/Control Number: 10/602,858 Page 7

Art Unit: 2858

noted that previously disclosed reference, Jasper (5,488,352), discloses an ABS diagnostic section and has a filing date of 1993. Gutierrez discloses diagnosing brake lights (column 4, lines 8-11), and that devices such as electric brakes may be tested (column 5, lines 27-29). Therefore, since anti-lock brakes were well known by the time of the Gutierrez application, and since Gutierrez discloses testing brake lights for an electronic braking system, it can be said that Gutierrez discloses the claimed ABS brake light diagnostic circuit.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Dole whose telephone number is (571) 272-2229. The examiner can normally be reached on Mon. thru Fri. from 8:00 to 4:30.

Application/Control Number: 10/602,858

Art Unit: 2858

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TID TAT.M

ANJAN DEB